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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,603	02/04/2004	Robin A. Steinbrecher	42P18546	5068

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EXAMINER

HOFFBERG, ROBERT JOSEPH

ART UNIT	PAPER NUMBER
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2835

DATE MAILED: 12/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/772,603	Applicant(s) STEINBRECHER, ROBIN A.	
	Examiner Robert J. Hoffberg	Art Unit 2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-13 and 21-24 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 and 14-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-13 and 21-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/4/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Election/Restrictions

Applicant's election with traverse of Claims 7-13 and 21-24 in the reply filed on November 16, 2005 is acknowledged. The traversal is on the ground(s) that all the groups I, II and III should be classified into a common area (i. e. classes 165 and/or 454). This is not found persuasive because class 165 is heat exchange (includes apparatus or process not provided for in other classes for transferring heat, or apparatus or process not provided for in other classes relating to an auxiliary device particularly adapted to be used with such heat transfer apparatus) and class 454 is ventilation (for apparatus and processes for supplying air to and removing it from enclosures, for distributing and circulating the air therein, or for preventing its contamination). Neither of these classes provide for the structural elements of an actuator or a control system for responding a change in the system operating condition.

The requirement is still deemed proper and is therefore made FINAL.

Specification

The disclosure is objected to because of the following informalities: Para. 0025, line 2, "system 100" should be "system 300". Para. 0026, line 1, "330" should be "320".

Appropriate correction is required.

Claim Objections

Claim 8 is objected to because of the following informalities: "second first power supply" is interpret as "second power supply". Appropriate correction is required.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larson et al. (US 2004/0252456) as applied to claim 9, above, in view of Espinoza-Ibarra et al. (US 6,961,242).

With respect to Claim 7, Larson et al. teaches a system, comprising: a first component (Fig. 1, #28); a first airflow gate (Fig. 1, #74 near #28) able to reduce airflow to the first component; a second component (Fig. 1, #30); and a second airflow gate (Fig. 1, #74 near #30) able to reduce airflow to the second component. Larson et al. does not teach the components are power supplies. With respect to Claim 8, Larson et al. further teaches wherein the first airflow gate is able to prevent airflow (Para. 0030, line 2-3) to the first component (Fig. 1, #88 near #30), and wherein the second airflow gate able to prevent airflow (Para. 0030, line 2-3) to the second component (Fig. 1, #88 near #30). With respect to Claim 9, Larson et al. further teaches further comprising: one or more fans (Fig. 1, #38 and Para. 0027, lines 5-6) to provide airflow to at least one of the first component and the second component. With respect to Claim 12, Larson et al. further teaches detection circuitry associated (Col. 1, #78) with the first component and arranged to cause the first airflow gate to close (Fig. 1, #88 near #28. Espinoza-Ibarra et al. teaches a first (Fig. 1, #142) and second (Fig. 1, #148) power supplies where the

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failure of each of the power supplies is detected (Col 3, lines 33-47). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Larson et al. with that of Espinoza-Ibarra et al. for the purpose of monitoring the performance of the power supplies and reducing the airflow to the failed power supply in order to maximize airflow to properly functioning power supply

With respect to Claims 10 and 11, Larson et al. teaches the system of claim 9. Larson fails to teach the deactivation or increasing the speed of one or more fans. Espinoza-Ibarra et al. teaches wherein at least one of the one or more fans (Col. 1, line 19) is deactivated when one of the first and second power supplies (Col. 1, line 19) fail (Col. 3, lines 15-16). Espinoza-Ibarra et al. also teaches wherein at least one of the one or more fans (Col. 1, line 19) is operated at a higher speed (Col. 3, line 1 desired speed) at when one of the first and second power supplies fail (Col. 3, lines 15-16). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Larson et al. with that of Espinoza-Ibarra et al. for the purpose of deactivating or increase the speed of the fan or fans to reduce or increase the airflow, respectively, upon a power supply failure.

With respect to Claim 13, Larson et al. teaches the system of the above claims. While Larson et al. fails to disclose the electrical operation of the airflow gate, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Larson et al. to electrical power the first airflow gate by the first power supply and to configure the airflow gate to be in the normally closed

position so that when the first power supply is deactivated, the first airflow gate in its deenergized state will be in the closed position.

3. Claim 21-24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Larson et al. (US 2004/0252456) as applied to above claims, and in view of Aldridge et al. (US 6,791,209).

With respect to Claim 21, Larson et al. teaches a system, comprising: a plurality of components (Fig. 1, #28 and #30); a plurality airflow restrictors (Fig. 1, #74 near #28 and #30) respectively associated with the plurality of components; and at least one fan (Fig. 1, #38 and Para. 0027, line 6) to provide airflow to the plurality of components. Larson does not teach that the components are power supplies jointly supplying electrical power. With respect to Claim 22, Larson et al. further teaches detection circuitry (Col. 1, #78) to detect a failure in one of the plurality of components and to cause an associated one of the plurality of airflow restrictors to restrict airflow (Para. 0030, lines 2-3) to the one of the plurality of components. With respect to Claim 24, Larson et al. further teaches an actuator (Col. 1, #76) to close the associated one of the plurality of airflow restrictors based on detection of the failure (Para. 0033, line 6, control signals) in the one of the plurality of components by the detection circuitry (Fig. 1, #78). Aldridge teaches first (Fig. 1, #110) and second (Fig. 1, #120) power supply jointly (Col. 5, line 6, shared) supplying electrical power. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Larson et al. with that of Aldridge et al. for the purpose of increasing the reliability of the

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system by having redundant power supplies and maximizing airflow over the functioning power supplies.

With respect to Claim 23, Larson et al. teaches the system of the above claims. Larson et al. fails to disclose that the detection circuitry is further arranged to deactivate the one of the plurality of power supplies, it does teach that control signals are generated (Para. 0033, line 4). Aldridge et al. teaches detection circuitry is further arranged to deactivate (Col. 4, lines 34-35) the one of the plurality of power supplies. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Larson et al. in view of Aldridge et al. to arrange the detection circuitry to connect a control signal to one of the plurality of power supplies upon failure to deactivate this power supply.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Olarig et al. (US 6,639,794) teaches adaptive fan control upon a failure. Cuadra et al. (US 6,301,133) teaches a deactivation of a power supply upon its failure (Col. 13, line 67+).

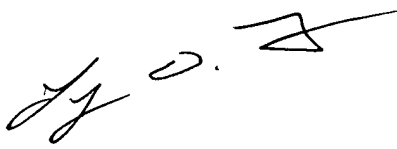
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert J. Hoffberg whose telephone number is (571) 272-2761. The examiner can normally be reached on 8:30 AM - 4:30 PM Mon - Fri.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D. Feild can be reached on (571) 272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RJH



LYNN FEILD
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